

PI 1192413

REC'D 19 JUL 2004

WIPO

PCT

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

July 15, 2004

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM  
THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK  
OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT  
APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A  
FILING DATE.

APPLICATION NUMBER: 60/457,965

FILING DATE: March 27, 2003

RELATED PCT APPLICATION NUMBER: PCT/US04/09434

By Authority of the  
COMMISSIONER OF PATENTS AND TRADEMARKS



*M. Tarver*

M. TARVER  
Certifying Officer

**PRIORITY  
DOCUMENT**

SUBMITTED OR TRANSMITTED IN  
COMPLIANCE WITH RULE 17.1(a) OR (b)

03-28-03

60457965 PTO/SB/16 (10/01)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

**PROVISIONAL APPLICATION FOR PATENT COVER SHEET**

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No.

EU 982357215 US

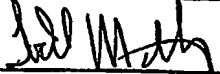
JC950 U.S.

03/27/03

INVENTOR(S)					
Given Name (first and middle (if any))	Family Name or Surname		Residence (City and either State or Foreign Country)		
Brock Wayne	Watson		Carrollton, Texas		
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (500 characters max)					
HYDRAULICALLY ACTIVATED EXPANSION CONE					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input type="checkbox"/> Customer Number	000027684		Place Customer Number Bar Code Label here		
OR Type Customer Number here					
<input checked="" type="checkbox"/> Firm or Individual Name	Todd Mattingly				
Address	1000 Louisiana Street				
Address	Suite 4300				
City	Houston	State	TX	ZIP	77002-5012
Country	USA	Telephone	713-547-2301	Fax	713-236-5585
ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification	Number of Pages	32	<input type="checkbox"/> CD(s), Number		
<input type="checkbox"/> Drawing(s)	Number of Sheets		<input checked="" type="checkbox"/> Other (specify)	Return Receipt Postcard	
<input type="checkbox"/> Application Data Sheet.	See 37 CFR 1.76				
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT					
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.					FILING FEE AMOUNT (\$)
<input type="checkbox"/> A check or money order is enclosed to cover the filing fees					
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number:	08-1394				\$160.00
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

Respectfully submitted,

SIGNATURE



Date 03/27/2003

TYPED or PRINTED NAME Todd Mattingly

REGISTRATION NO.  
(if appropriate)

40,298

TELEPHONE 713-547-2301

Docket Number:

25791.260

**USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT**

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

EXPRESS MAIL NO. EU 982357215 US

DATE OF DEPOSIT: March 27, 2003

The Provisional Application for Patent Cover Sheet and the following 32 pages are being deposited with the U.S. Postal Service Express Mail Post Office to Addressee Service under 37 CFR §1.10 on the date indicated above and is addressed to: BOX PROVISIONAL PATENT APPLICATION, Commissioner for Patents, Washington, D.C. 20231

Vikki M. Meriwether

Name of person mailing paper and fee

Vikki M. Meriwether

Signature of person mailing paper and fee

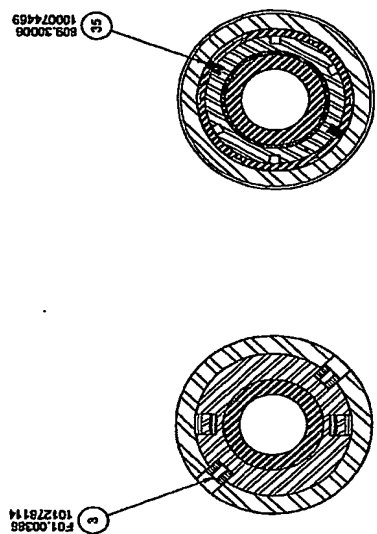
## HYDRAULICALLY ACTIVATED EXPANSION CONE

INVENTOR: BROCK WATSON

The first, F03.00077 is an expandable/retractable cone assembly used to expand the overlap section at the bottom of the casing. This tool will expand when pressure (<500 psi) is applied to the inside and it will collapse by spring power. However, the tool cannot collapse if the cone is near the end of the casing because the cone segments (items 20) have to move upwards to collapse. The tool has a device that checks the diameter (items 43 & 44). If the diameter is smaller than the expanded cone OD the cone will not try expanding. However, there is an override device that prevents the tool from checking the diameter until it is expanded one time (items 49, 50, & 51).

There is a burst pressure disk located below the cone segments (item 37). This is an emergency release device that is used incase the upper mechanism gets hung up and cannot collapse the cone. Once the burst disk is ruptured, a sleeve (item 16) will shift and uncover some dogs (item 15). The pressure acting across the lower piston (item 19) will pull the lower cone segments (item 5) down and collapse the cone assy.

The second tool is F03.00220. This cone is the same as F03.00077 except the cone is smaller and is used for the general expansion of the casing. This tool does not have the casing diameter checking device installed. It also has a device that locks the cone in the expanded position once it has been expanded. It has the same safety device.



**SECTION C-C**  
**SCALE 3:8**

**SECTION D-D**  
**SCALE 3:8**

[illegible]





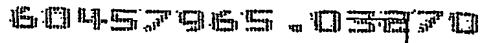
-4-





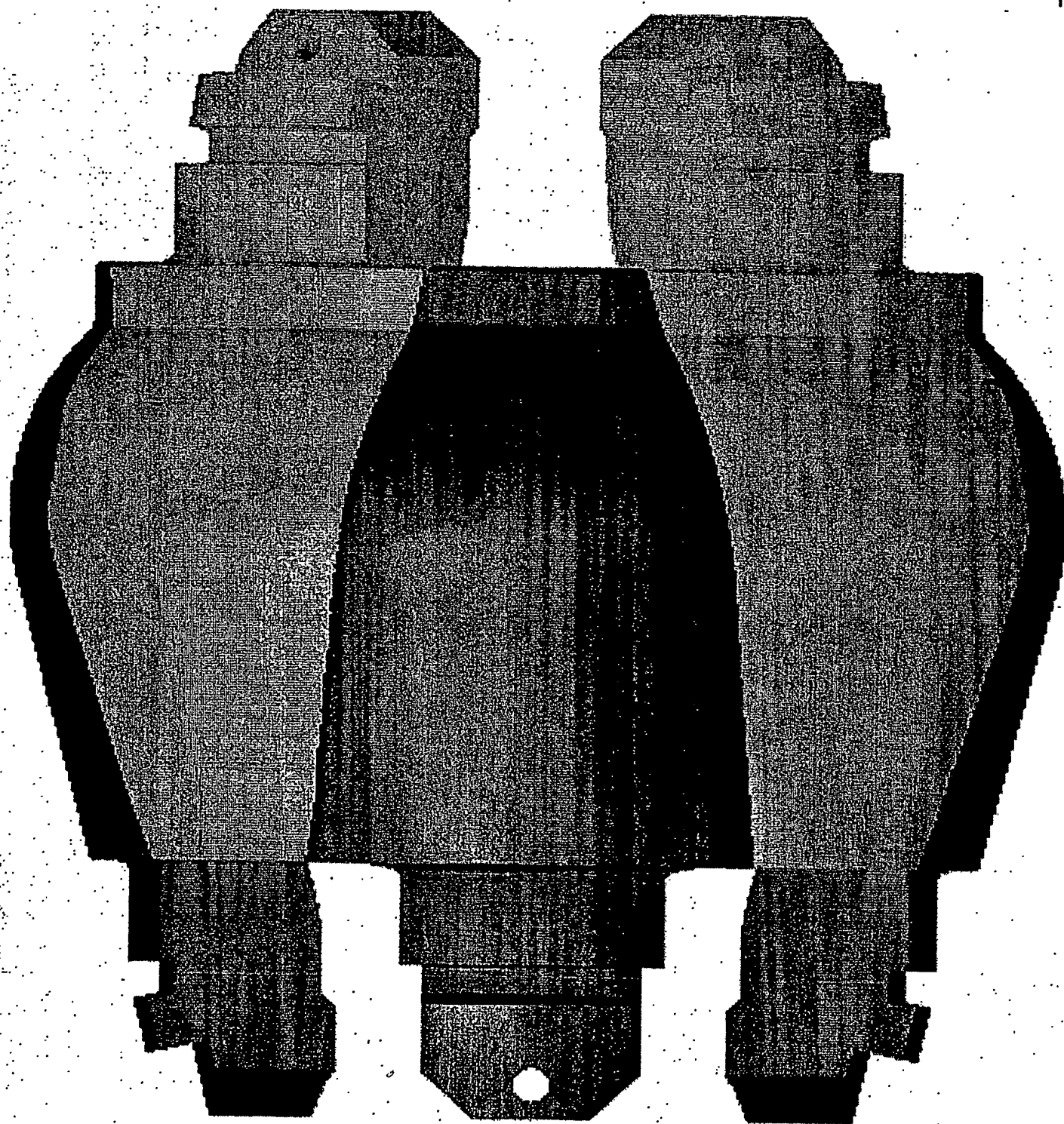






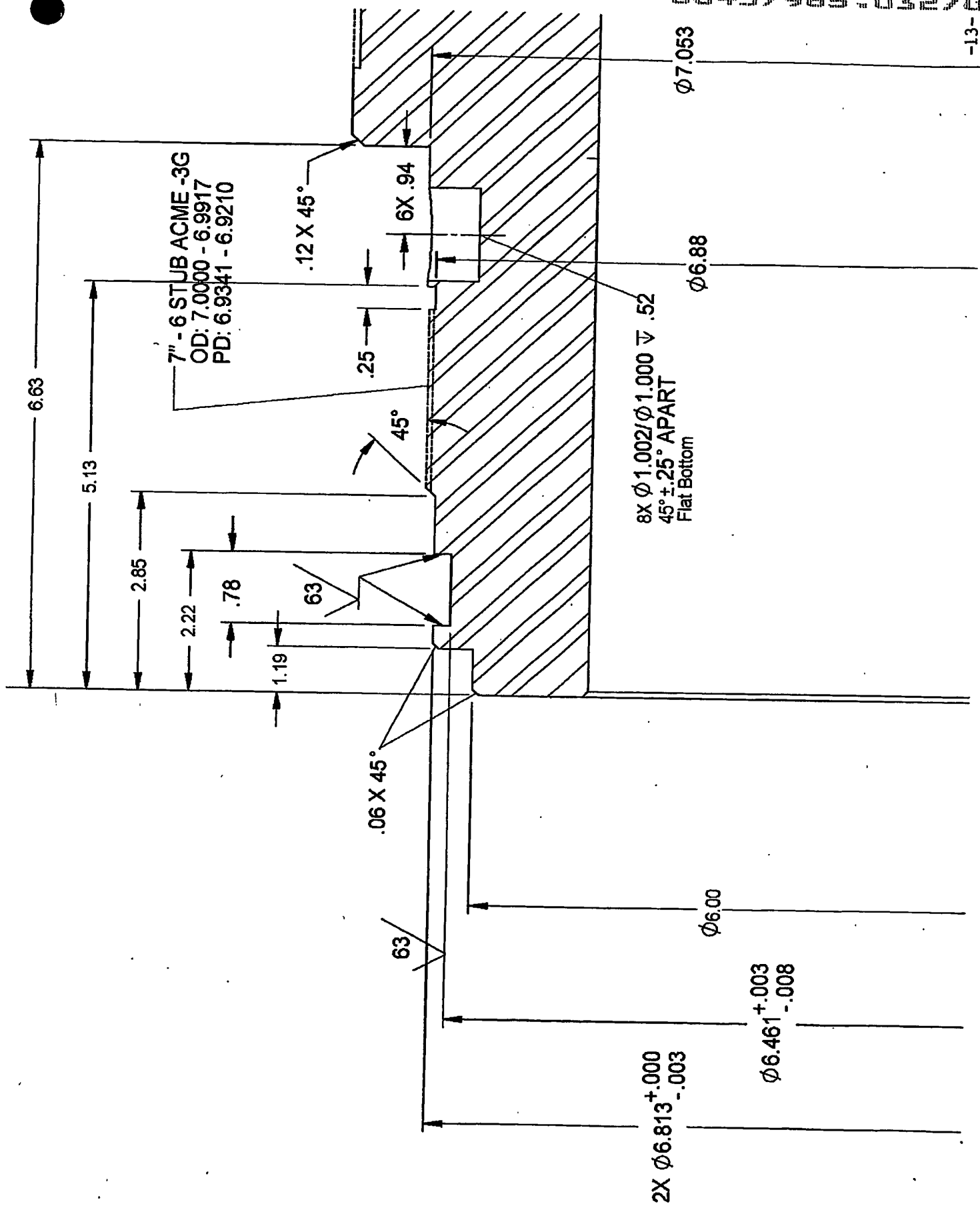






(0.063)

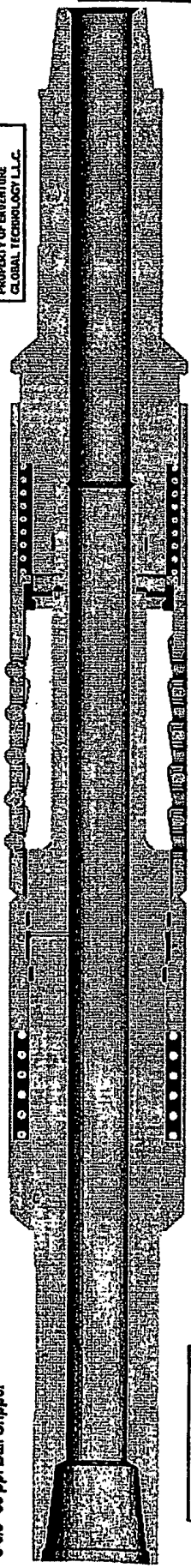
12 MAY 1964, 0400Z





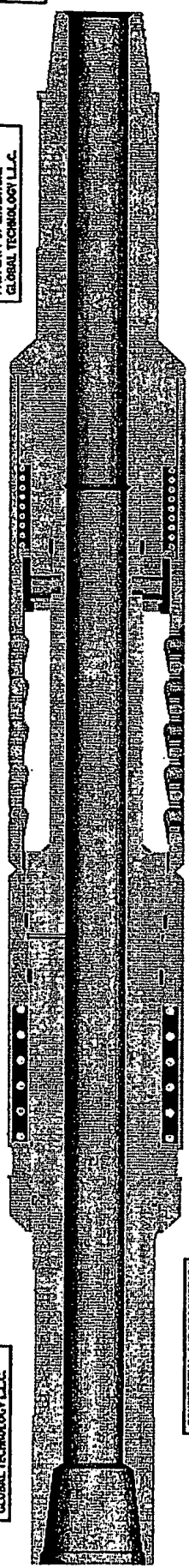
9-618" 36 ppf Ball Gripper

PROPERTY OF ENVENTURE  
GLOBAL TECHNOLOGY LLC



CONFIDENTIAL AND PROPRIETARY  
PROPERTY OF ENVENTURE  
GLOBAL TECHNOLOGY LLC

CONFIDENTIAL AND PROPRIETARY  
PROPERTY OF ENVENTURE  
GLOBAL TECHNOLOGY LLC



CONFIDENTIAL AND PROPRIETARY  
PROPERTY OF ENVENTURE  
GLOBAL TECHNOLOGY LLC

CONFIDENTIAL AND PROPRIETARY  
PROPERTY OF ENVENTURE  
GLOBAL TECHNOLOGY LLC

CONFIDENTIAL AND PROPRIETARY

072501 59675409



# CAP Web Application

Enter your CAP ID and User ID in the boxes below and click the Enter button.

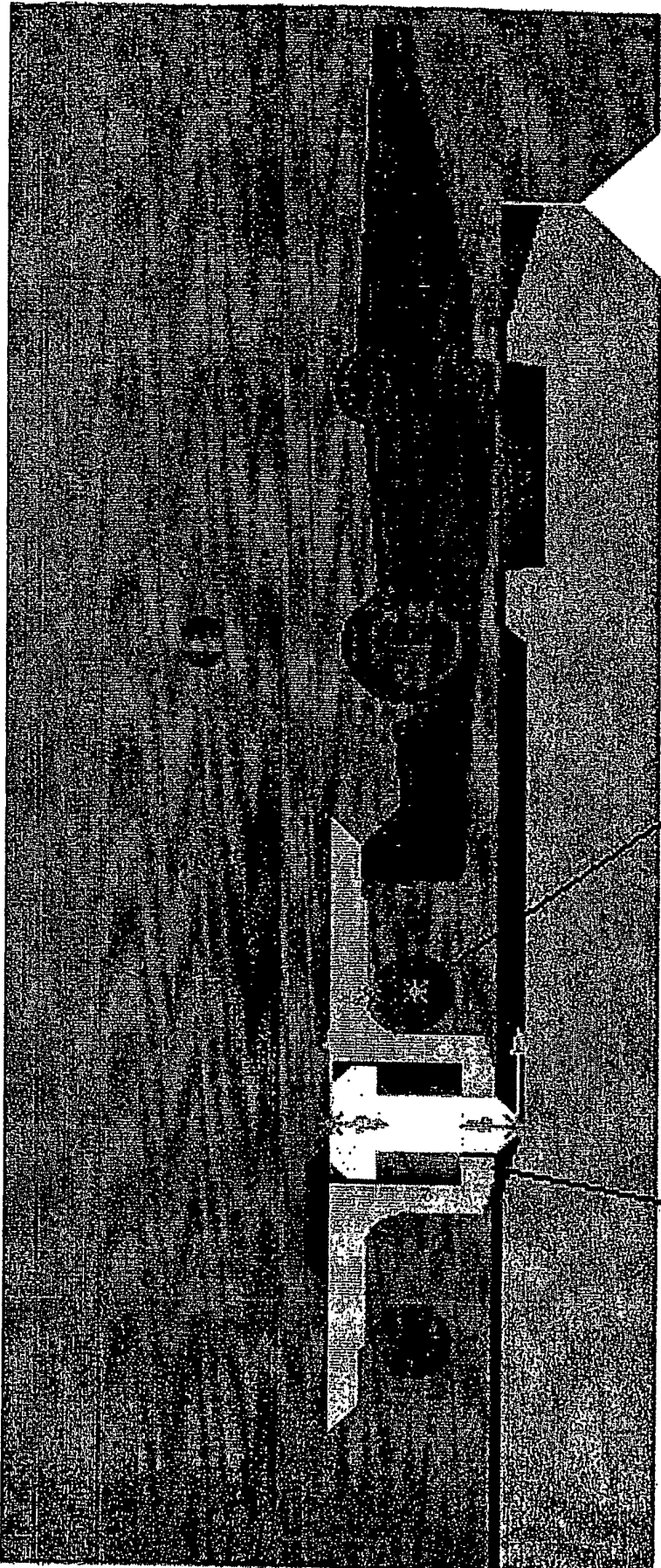
Domain	HALLAMERICA
User ID	hba7974

Enter

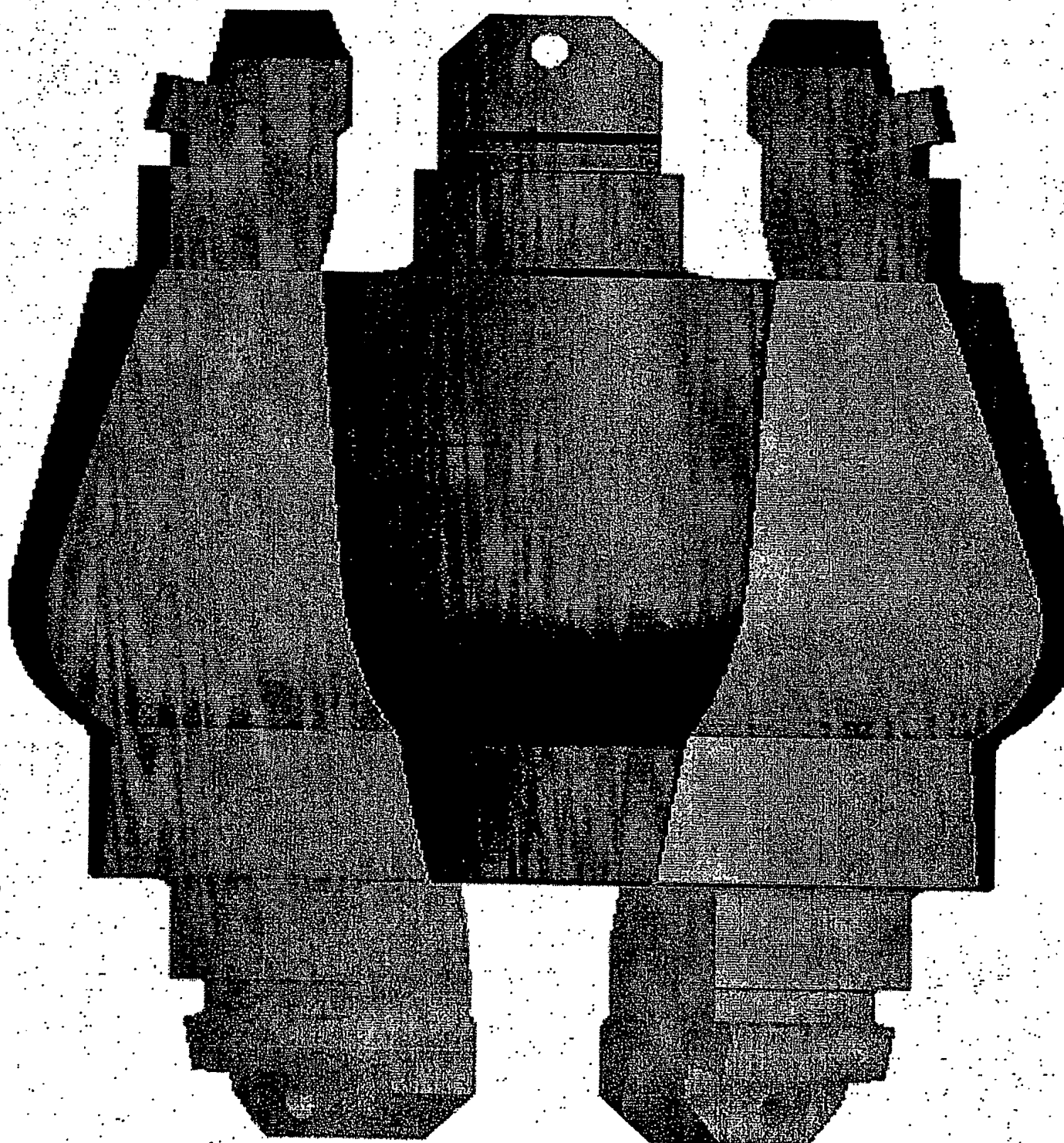
This web site contains business and technical information and data, trade secrets, and know-how that are highly confidential and proprietary to Enventure and/or Halliburton Company. Any unauthorized publication or disclosure of such information to any person, or any unauthorized use of such information, without the express written consent of Enventure is strictly prohibited.

**For more information, contact: Information Technology**

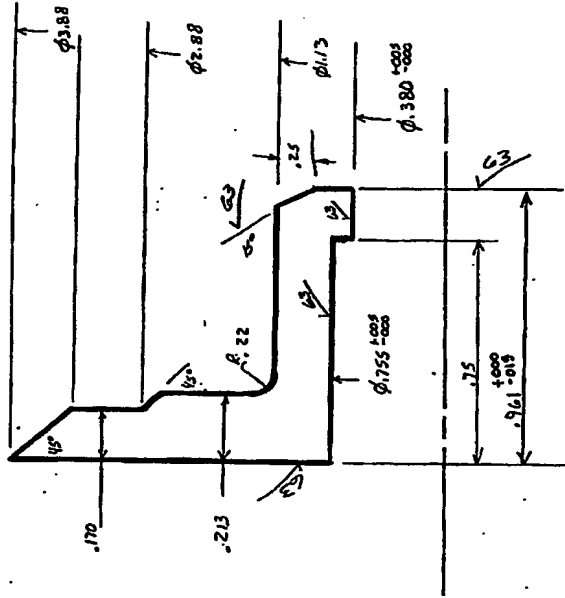
**Add two pins and screws**



**F03.00071  
F03.00072  
F03.00073(Spring)**





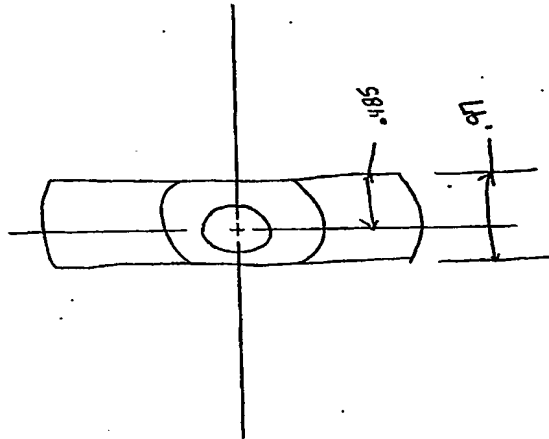


125/

F03.00071

F03.00071.

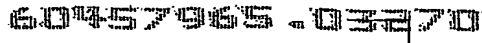
-20-

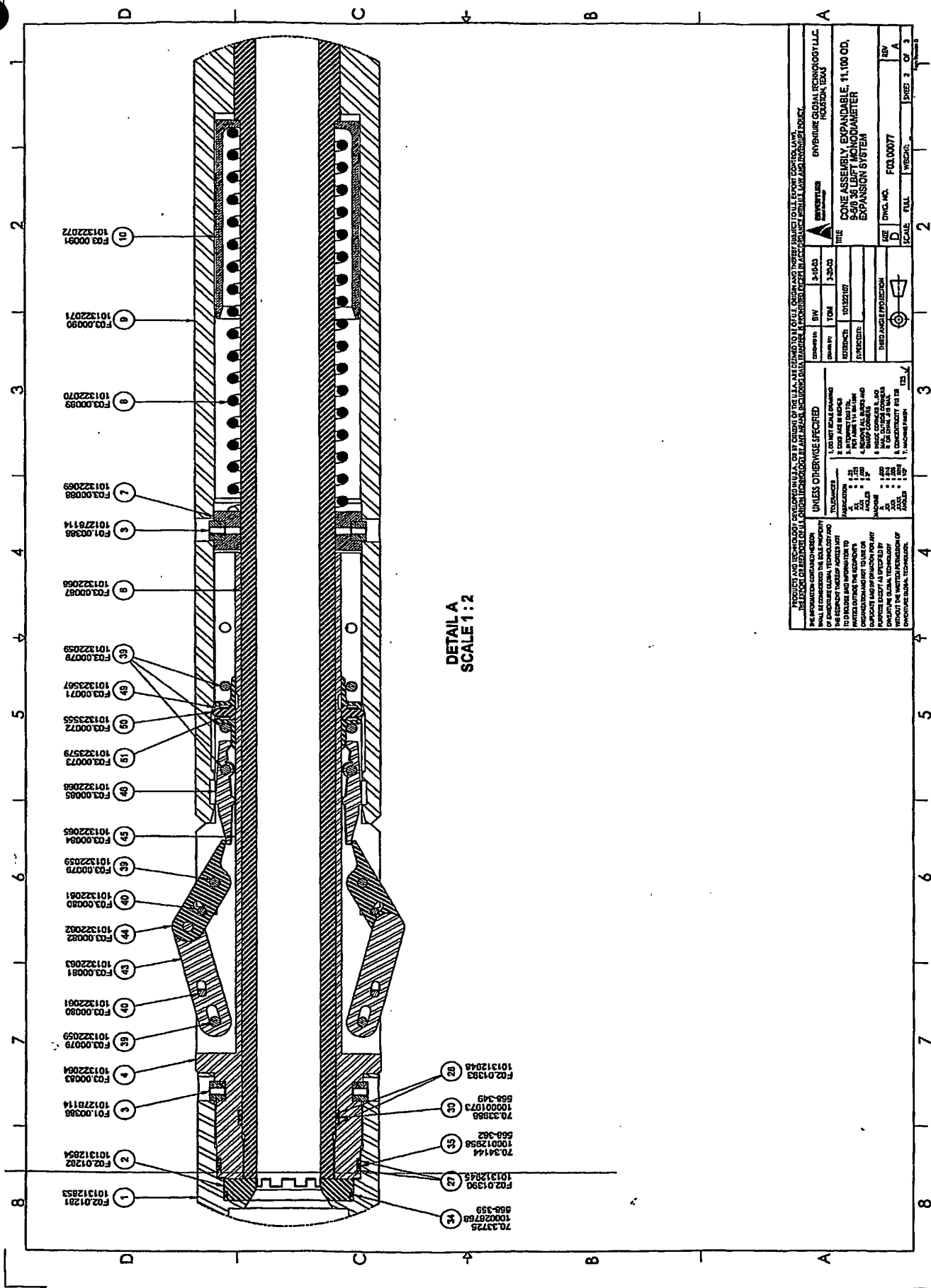








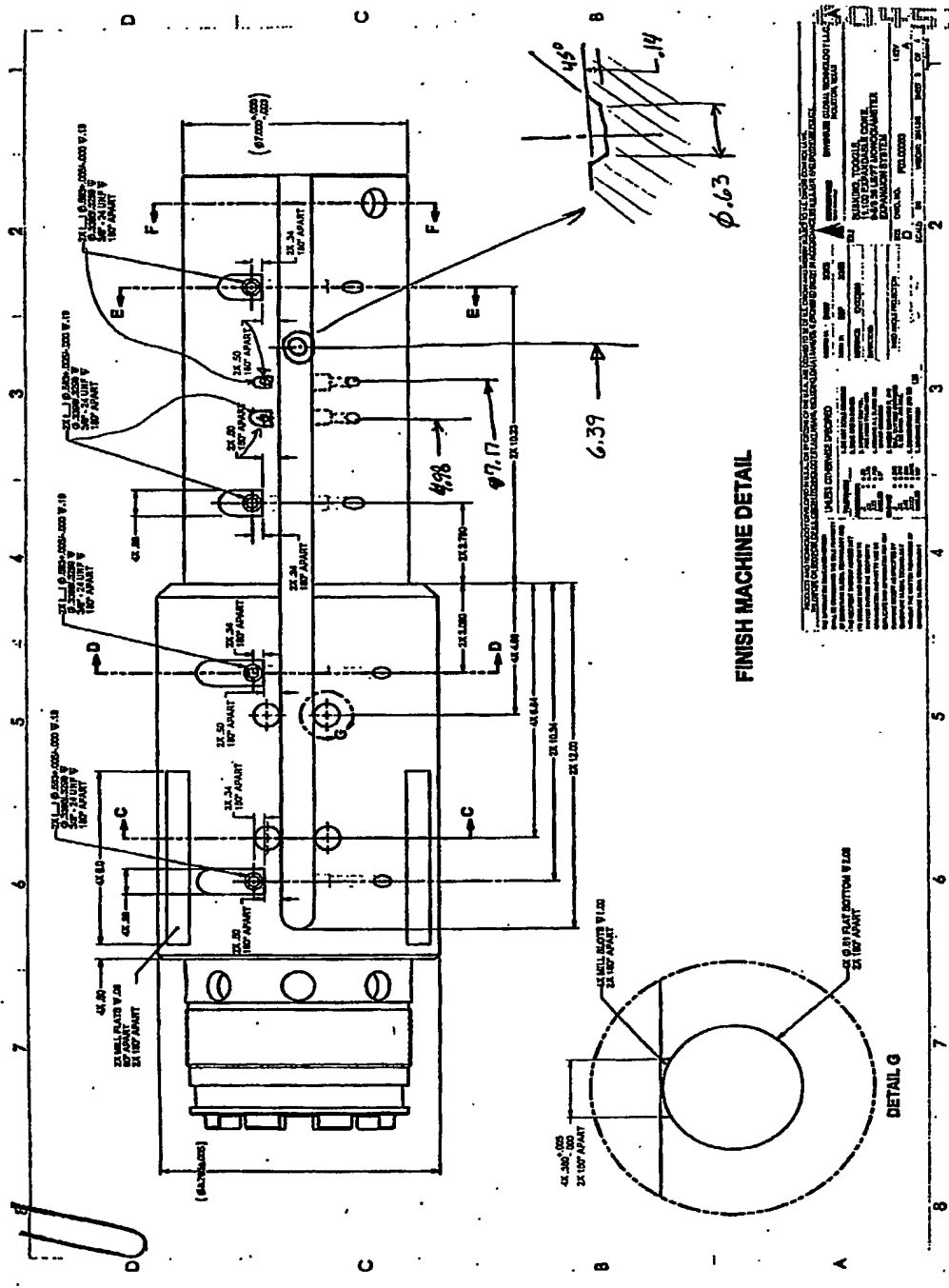




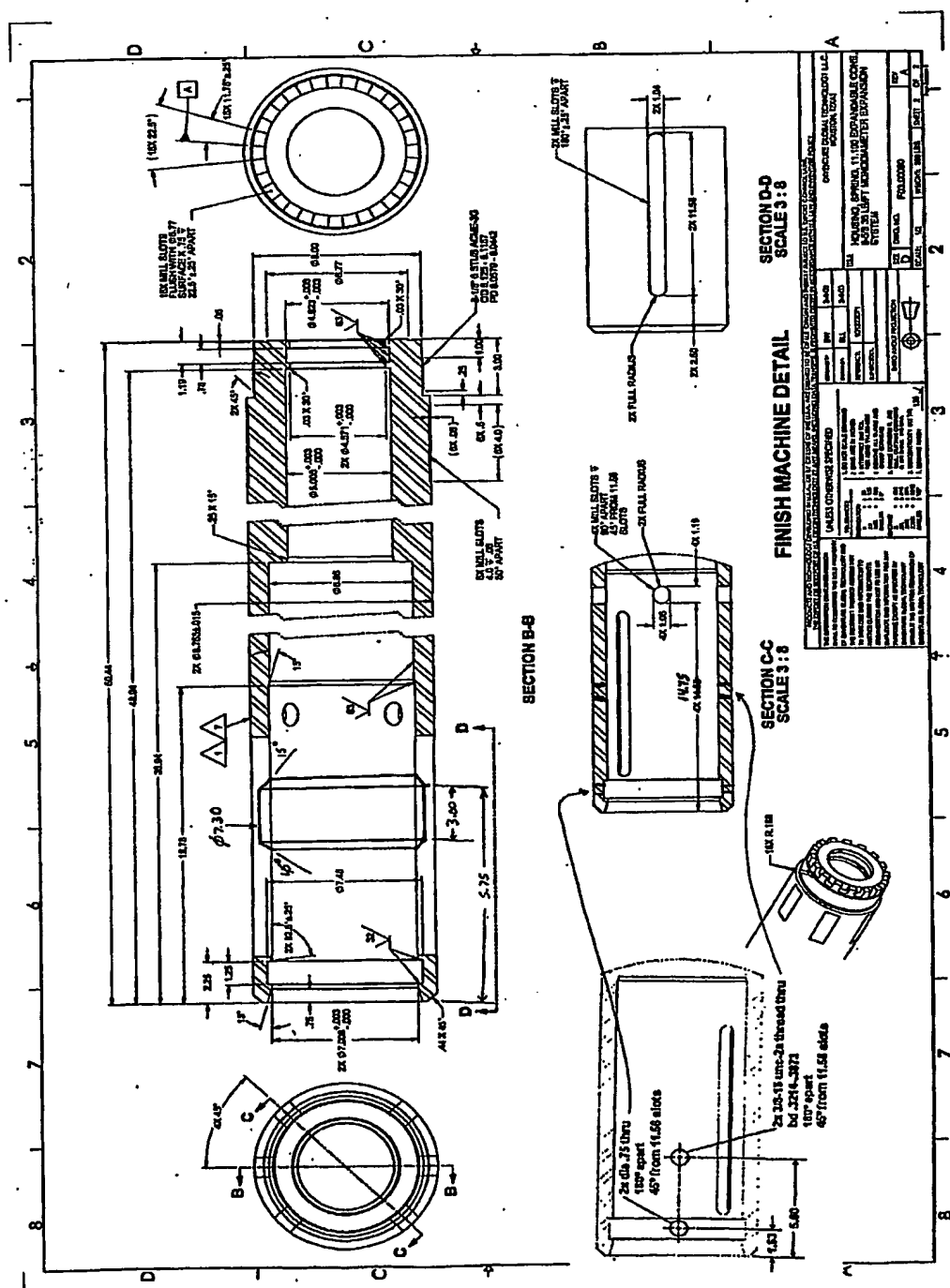


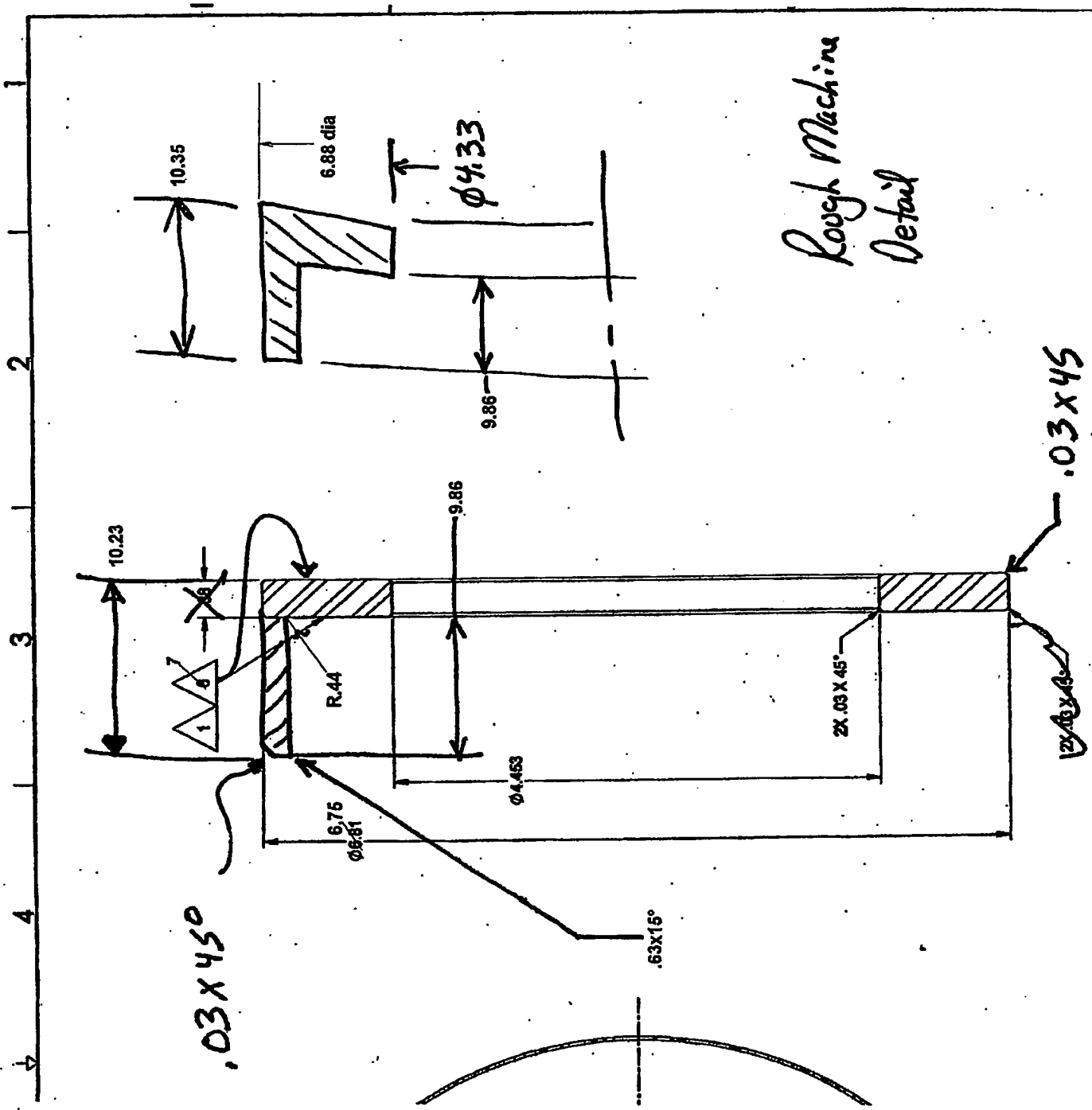
**DETAIL B**  
**SCALE 7:16**

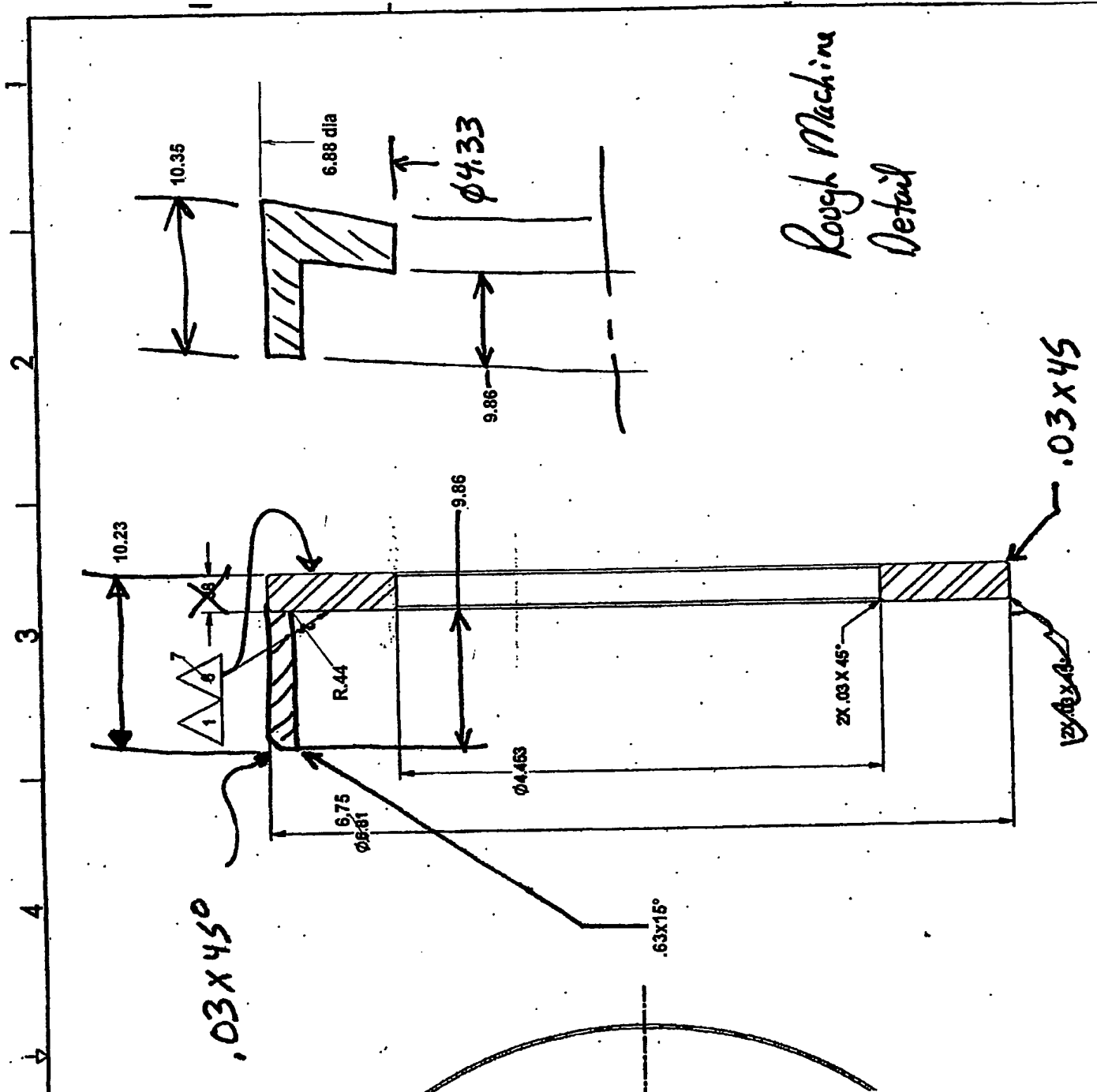
[illegible]



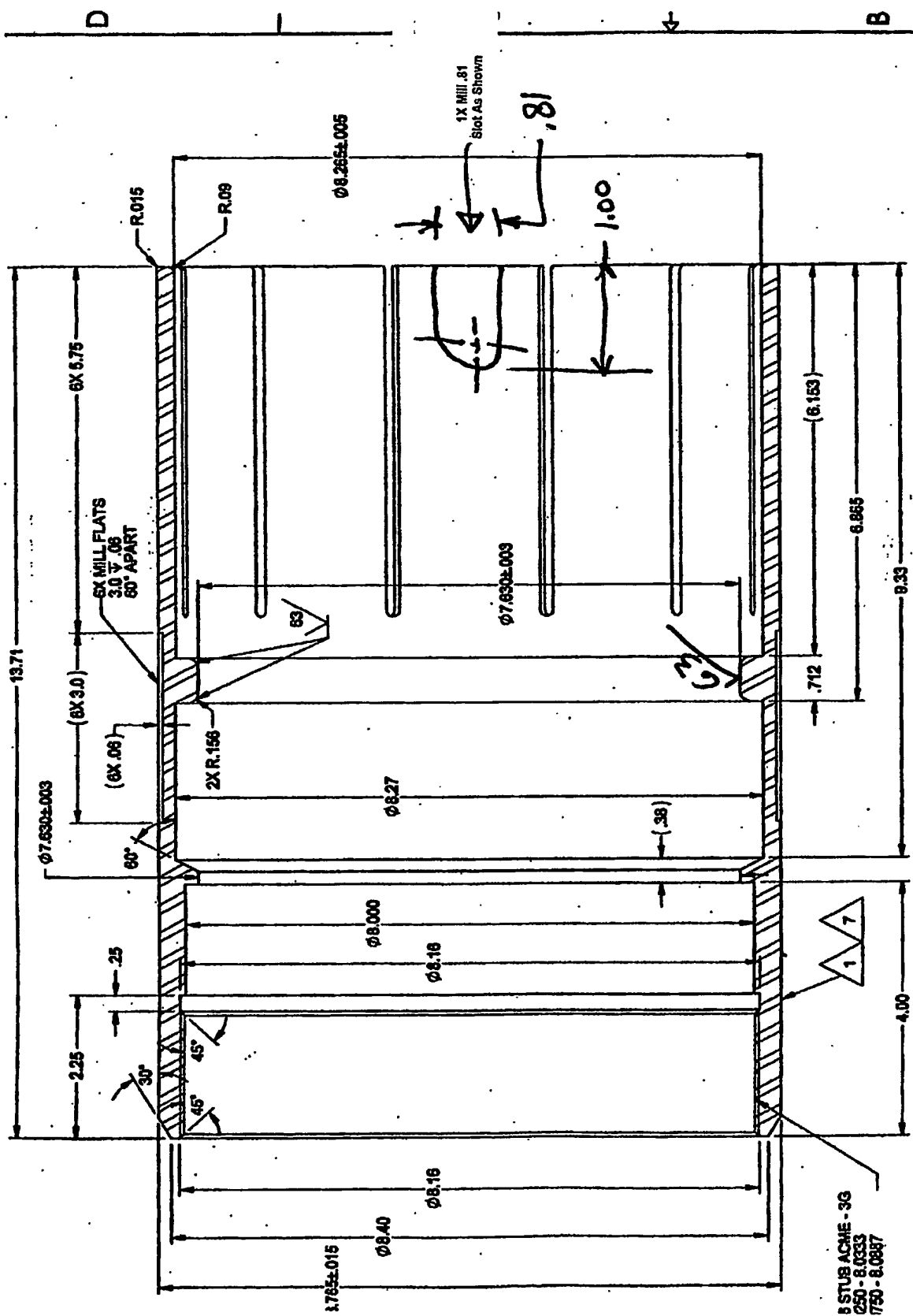
REVISIONS	
NO.	DESCRIPTION
1	AS SHOWN
2	AS SHOWN
3	AS SHOWN
4	AS SHOWN
5	AS SHOWN
6	AS SHOWN
7	AS SHOWN
8	AS SHOWN
9	AS SHOWN
10	AS SHOWN
11	AS SHOWN
12	AS SHOWN
13	AS SHOWN
14	AS SHOWN
15	AS SHOWN
16	AS SHOWN
17	AS SHOWN
18	AS SHOWN
19	AS SHOWN
20	AS SHOWN
21	AS SHOWN
22	AS SHOWN
23	AS SHOWN
24	AS SHOWN
25	AS SHOWN
26	AS SHOWN
27	AS SHOWN
28	AS SHOWN
29	AS SHOWN
30	AS SHOWN
31	AS SHOWN
32	AS SHOWN
33	AS SHOWN
34	AS SHOWN
35	AS SHOWN
36	AS SHOWN
37	AS SHOWN
38	AS SHOWN
39	AS SHOWN
40	AS SHOWN
41	AS SHOWN
42	AS SHOWN
43	AS SHOWN
44	AS SHOWN
45	AS SHOWN
46	AS SHOWN
47	AS SHOWN
48	AS SHOWN
49	AS SHOWN
50	AS SHOWN
51	AS SHOWN
52	AS SHOWN
53	AS SHOWN
54	AS SHOWN
55	AS SHOWN
56	AS SHOWN
57	AS SHOWN
58	AS SHOWN
59	AS SHOWN
60	AS SHOWN
61	AS SHOWN
62	AS SHOWN
63	AS SHOWN
64	AS SHOWN
65	AS SHOWN
66	AS SHOWN
67	AS SHOWN
68	AS SHOWN
69	AS SHOWN
70	AS SHOWN
71	AS SHOWN
72	AS SHOWN
73	AS SHOWN
74	AS SHOWN
75	AS SHOWN
76	AS SHOWN
77	AS SHOWN
78	AS SHOWN
79	AS SHOWN
80	AS SHOWN
81	AS SHOWN
82	AS SHOWN
83	AS SHOWN
84	AS SHOWN
85	AS SHOWN
86	AS SHOWN
87	AS SHOWN
88	AS SHOWN
89	AS SHOWN
90	AS SHOWN
91	AS SHOWN
92	AS SHOWN
93	AS SHOWN
94	AS SHOWN
95	AS SHOWN
96	AS SHOWN
97	AS SHOWN
98	AS SHOWN
99	AS SHOWN
100	AS SHOWN







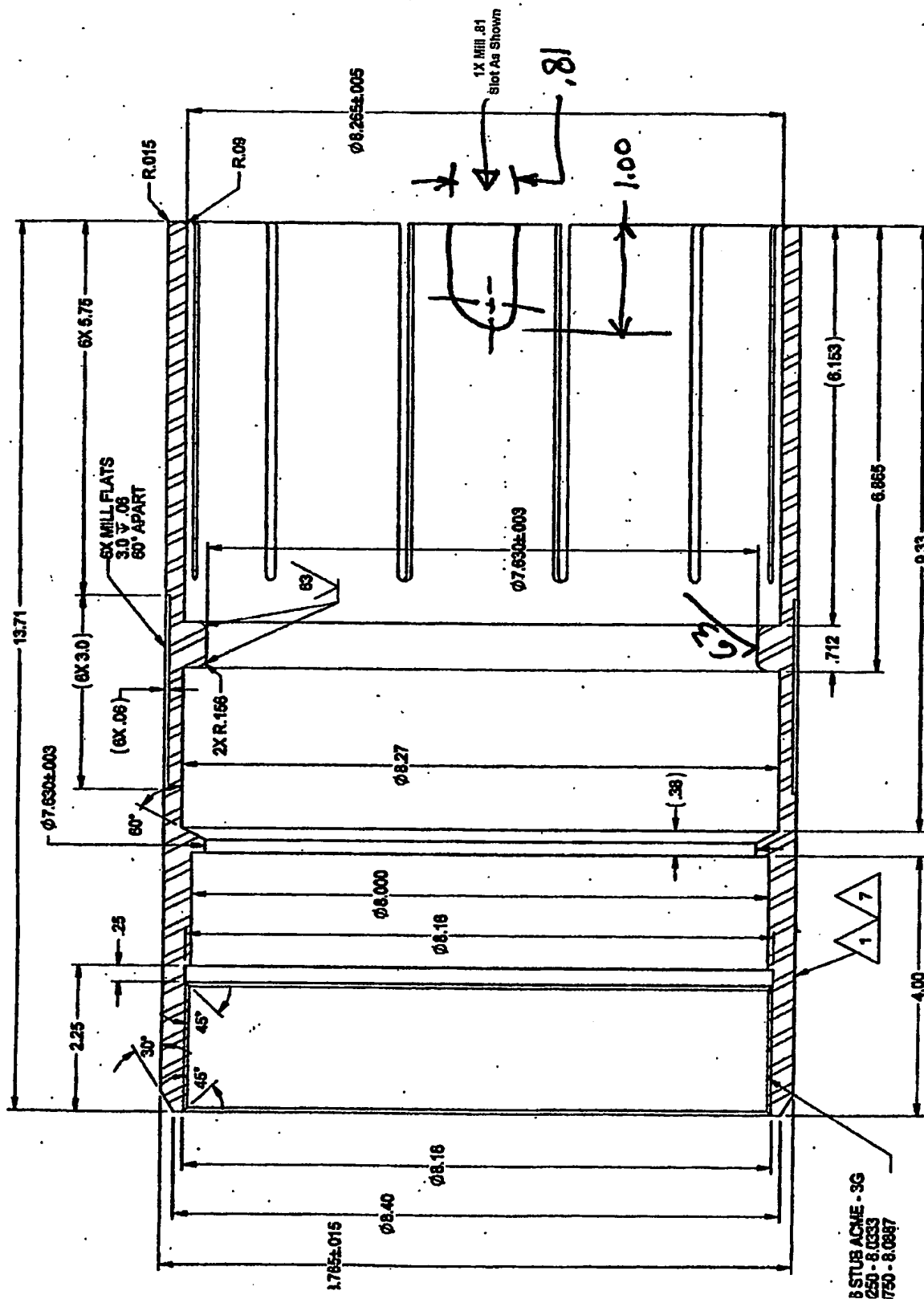




SECTION A-A

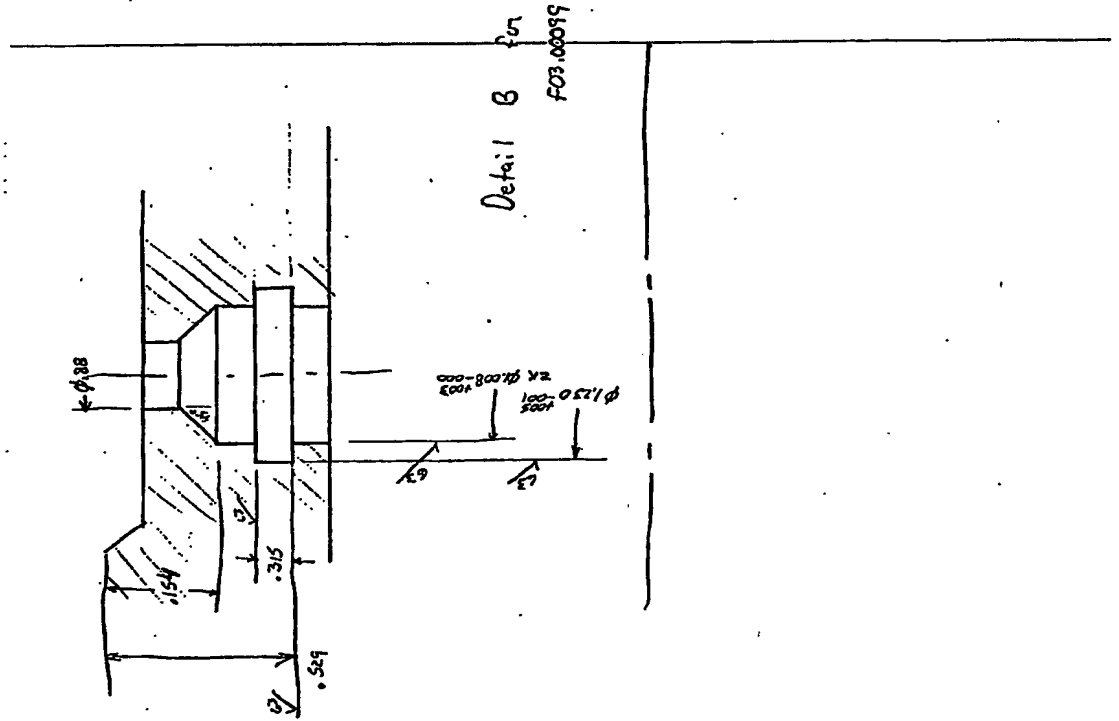
12X MILL SLOTS  
.19 WIDTH V

5 STUBS ACME - 3G  
250 - 8.0333  
1750 - 8.0897



# SECTION A-A

F03.000 99



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**